**SANTOS** :
140-150 AVENUE ROGER SALENGRO
69120 VAULX-EN-VELIN (LYON) - FRANCE
TÉL. 33 (0) 472 37 35 29 - FAX 33 (0) 478 26 58 21 -
TELECOPIE 33 (0) 478 26 58 21
E-Mail :santos@santos.fr www.santos.fr

# JUICE EXTRACTOR # 50

## USER AND MAINTENANCE MANUAL

**IMPORTANT: documents included in this manual to be kept:**

- **"CE" COMPLIANCE DECLARATION**
- **WARRANTY CERTIFICATE**

Coffee grinders - Fruit juicers - Mixers - Blenders - Drinks dispensers - Planetary mixers
Cheese graters - Ice crushers - Mincers - Vegetable slicers – Dough mixer
Moulins à café - Presse-fruits - Mixers - Blenders - Distributeurs de boissons - Batteurs mélangeurs - Pétrin - Râpes à fromage - Broyeurs à glaçons - Hache-viande - Coupe-légumes

MODELES DEPOSES FRANCE ET INTERNATIONAL
INTERNATIONALLY PATENTED MODELS

ENG

## *CONTENTS*


"CE" COMPLIANCE DECLARATION ..... 3
IMPORTANT SAFEGUARDS ..... 4
INSTALLATION AND HANDLING ..... 4
IMPROPER USE ..... 4
ELECTRICAL CONNECTION: ..... 4
USING FOR THE 1st TIME: ..... 5
RECYCLING THE PRODUCT AT THE END OF ITS SERVICE LIFE ..... 5
JUICE EXTRACTOR #50 and basket ..... 6
USING FOR THE FIRST TIME: ..... 6
USING THE MACHINE FOR THE FIRST TIME: ..... 6
Assembly and preparation: ..... 6
Using: ..... 7
Stopping the machine: ..... 7
Cleaning: ..... 7
Precautions and risks: ..... 7
HOW TO STOP THE MACHINE ..... 8
CHANGING PRODUCTS DURING JUICE PRODUCTION AND CLEANING IN PLACE ..... 8
SAFETY / MAINTENANCE ..... 9
COVER AND BOWL PRESENCE SAFETY DEVICE: ..... 9
MOTOR OVERLOAD SAFETY FEATURE: ..... 9
MOTOR OVERHEATING SAFETY FEATURE: ..... 9
TOOL ACCESS SAFETY FEATURE: ..... 9
MAINTENANCE ..... 9
Discharging the capacitor: ..... 10
UPKEEP: ..... 10
FAULT FINDING ..... 11
The machine will not start: ..... 11
The machine stops because of an overload: ..... 11
The machine vibrates when running empty: ..... 11
REFERENCE TO STANDARDS ..... 12
TECHNICAL SPECIFICATIONS (1) ..... 12
Electrical wiring diagram 110-120V 50/60Hz ..... 13
Electrical wiring diagram 220-240V 50/60Hz ..... 14
TRANSLATION CHART FOR ELECTRICAL COMPONENTS ..... 15
TRANSLATION CHART FOR WIRE COLORS ..... 15
TRANSLATION CHART FOR THE MACHINE ELEMENTS ..... 15
Figures : ..... 16
WARRANTY CERTIFICATE ..... 18
APPLIANCE IDENTIFICATION PLATE ..... 18


Note: You will find it easier to understand the next few paragraphs if you refer to the diagrams at the end of this manual.

ENG

# "CE" COMPLIANCE DECLARATION

THE MANUFACTURER:

**SANTOS SAS -** 140-150, Av. Roger SALENGRO 69120 VAULX-EN-VELIN (LYON) FRANCE

HEREBY DECLARES THAT THE MACHINE DESIGNATED ON THE IDENTIFICATION PLATE AFFIXED:

- UNDER THE APPLIANCE,
- ON THE WARRANTY CERTIFICATE ON THE LAST PAGE OF THIS MANUAL,

COMPLIES WITH THE PROVISIONS OF THE "machines" DIRECTIVE n° 2006/42/CE AND THE NATIONAL LEGISLATION TRANSPOSING IT.

IT ALSO COMPLIES WITH THE PROVISIONS OF THE FOLLOWING EUROPEAN DIRECTIVES:

- No. 2006/95/EC (Low voltage directive)
- No. 2004/108/EC (CEM directive)
- No. 2002/95/EC (RoHS directive)
- No. 2002/96/EC (WEEE directive)

The machine complies with the provisions of the following harmonized European standards:

- **NF EN 1678+A1: 2010** Machines for food products - vegetable slicers. Safety and hygiene regulations.
- **NF EN 12547+A1: 2009** Juice extractor. Common safety instructions
- NF EN ISO 12100-1 and 2:2004: Machine safety devices - General design principles
- NF EN 60204-1:2006: Machine safety devices - Machine electrical equipment -General regulations
- NF EN 60335-1:2003 Safety of household and similar electrical appliances
- EN 60335-2-64 :2004 Part 2-64: Particular requirements for commercial electric kitchen machines

SIGNED IN VAULX-EN-VELIN ON: **01/03/2010**
SIGNATORY'S TITLE: **CHIEF EXECUTIVE OFFICER**
SIGNATORY'S NAME: **Aurélien FOUQUET**

SIGNATURE

ENG

# IMPORTANT SAFEGUARDS

When using, cleaning or maintaining the machine, always follow these instructions:

Read all instructions

Note: You will find it easier to understand the next few paragraphs if you refer to the diagrams at the end of this manual.

## INSTALLATION AND HANDLING

**CARE: For all handling operations including unpacking the machine, neither the cover clamping handle (1) nor the clamping rods (9) must not be used for holding or lifting the appliance.**

The machine can be handled by a single person. It is recommended that the appliance be placed on a table or worktop for more comfortable use, so that the juice outlet spout and the On / Off switch are in front of you (recommended height: 90 cm, to be adapted as required for the user). Like this, the pulp container is then at the back of the machine.
If however the worktop is too small, a position can be used with the juice outlet spout on the left and the On / Off switch visible on the front. Like this, the pulp container is then located on the right side.

During cleaning and installation, handle the basket assembly (5) carefully so as not to put it out of shape thus preventing the machine from working properly.

## IMPROPER USE

1. Do not place food in the channel and press with the plunger before you have started the machine.
2. The appliance is not designed for handling frozen foods.
3. Remove stones from fruit before processing it in the machine (e.g.: mangoes, apricots, peaches). Do not let the stones go into the machine.
4. Neither a hose nor a pressure hose should be used for cleaning
5. The machine must not be left to operate without supervision.
6. Do not use abrasive sponge for cleaning the basket
7. Use of spare parts other than certified original SANTOS parts is prohibited.

## ELECTRICAL CONNECTION:

The juice extractor no. 50 is available in two voltages for the electrical power supply

- 220-240V 50/60 Hz single phase
- 110-120V 50/60 Hz single phase

ENG

Line protection: the appliance should be connected to a standard 2-pole + earth electric socket. The installation should be fitted with an RCD and a fuse rated at 16A **The appliance must be earthed**

**CARE:**

- Before connecting the machine, check that the mains electrical voltage is the same as the voltage for your appliance. Its value is shown:
  - either on the identification plate (**16**) under the machine.
  - or on the identification plate on the last page of this manual.

- If the power cable (**10**) is damaged, it should be replaced by a special assembly available from approved SANTOS dealers or from SANTOS.

## USING FOR THE 1st TIME:

1. Remove the plunger (3).
2. Turn the clamping handle (1) upwards to release the cover (2), Fig.2
3. To be able to remove the cover, turn the clamping handle and clamping rods (9) assembly to the front, Fig.3
4. Remove the cover (2), the bowl (4) and the basket assembly (5)
5. Remove the basket assembly (5) and wash in clean water
6. Wash all the elements in contact with food in clean water: the plunger (3), the cover (2), the bowl (4) and the pulp container (6).

## RECYCLING THE PRODUCT AT THE END OF ITS SERVICE LIFE

This equipment is marked with the selective sorting symbol relating to wastes from electrical and electronic equipment. It signifies that this product should be taken over by a selective collection system conforming to the Guideline 2002/96/EC (WEEE) – part Professional Equipment – so that it can be either recycled or dismantled in order to reduce any impact on the environment.

For more information, please contact your Retailer or the SANTOS.

For eliminating or recycling components of equipment, please contact a specialized company or contact SANTOS.

The electronic products not undergoing a selective sorting are potentially dangerous for the environment.

The damaging materials should be eliminated or recycled according to the regulations in force.

ENG

# JUICE EXTRACTOR #50 and basket

- Robust and very well-constructed (components made of cast aluminum, engineered plastic and 18/10 stainless steel plate), this juice extractor is particularly suitable for extracting juice and making coulis and sauce juices from fruits or vegetables used by the professionals in:
  Restaurants, Pizzerias, Snack Bars, Fast Food Outlets, Special Theme Restaurants, etc.
- It has a powerful motor which drives a **centrifugation basket.**

- **Centrifugation basket:** The active, filtering part of the basket is made of stainless steel, the lower part of the basket providing the drive and the locking system is made of food-quality engineered plastic.

- 18/10 press-drawn stainless steel **bowl** with stainless steel spout for collecting and funneling the product juices.

# USING FOR THE FIRST TIME:

## USING THE MACHINE FOR THE FIRST TIME:

### Assembly and preparation:

1. **Fit the bowl** (4) on the bowl centering device (7) making sure that the juice run-off spout is located in the indent provided for this at the front of the bowl centering device, Fig.4
2. **Place the basket assembly** (5) in the bowl (4), making sure it is located properly on the drive unit (17). It should go into place automatically by gravity but the position of the basket in the bowl should be checked when in place. Fig.5
3. **Fit the cover** (2) on the bowl (4) making sure that when it is fitted the cover outlet is lined up with the bowl outlet. Fig.6
4. **Turn the cover clamping assembly round** towards the feed channel with the clamping handle (1) raised, until it is above the two notches on the side of the cover (2). Fig.7
5. **Turn the clamping handle round** (1) downwards to clamp the cover (2) Fig.8
6. **Place the fruit plunger** (3) in the cover feed channel (2) and check that the underside of the plunger collar rests against the top of the cover feed channel.
7. **Position the pulp container** (6) correctly relative to the cover outlet (2), the bowl (4) and the machine stand (8).
8. **Connect the supply cord plug** (10) to your mains supply socket.
9. **Withdraw the fruit plunger** (3) from the cover feed channel (2).

ENG

## Using:

1. **Start the machine** by putting the On / Off switch (11) to the 1 position; the indicator will light up.

2. **Place the recipient** under the bowl spout (4)
3. **Introduce the fruits or vegetables** into the cover feed channel (2) and push them onto the rotating grater with the fruit plunger (3).
4. Continue this operation until the juice recipient is full or the quantity of fruit and vegetables to be processed has run out. Also keep an eye on the level of pulp in the pulp container (6).

## Stopping the machine:

1. After use, **stop the machine**:
   a. by putting the On / Off switch (11) to the 0 position,
   b. by turning the clamping handle (1) upwards.
   c. by unplugging the mains cord plug (10)
2. **Turn round the cover clamping assembly** (9) on the side opposite the cover feed channel (2) with the clamping handle (1) raised.
3. Take the bowl (4), basket assembly (5), cover (2) and fruit plunger (3) unit to wash them in clean water.

## Cleaning:

Handle the basket assembly (5) carefully so as not to put it out of shape thus preventing the machine from working properly.

To clean the basket assembly ( 5), the use of a non-abrasive brush is recommended to clean the filter sieve holes and the grater teeth properly.
Cleaning will be easier if you do not wait for the food remains to dry in the bowl, basket and cover.

## Precautions and risks:

During preparation, the **level in the pulp container** (6) should be monitored to prevent the cover pulp outlet (2) from clogging. Such clogging could result in an imbalance in the basket assembly (5) and thus a risk of damaging the machine.
The quantity of products to be processed before reaching the container (6) maximum filling varies depending on the products being processed. As an indication it corresponds to approximately 10 kilograms of apples and approximately 6 kilograms of carrots.
If during preparation an imbalance should occur well before the pulp container is full, it is sometimes appropriate to continue adding food for the imbalance to be cleared.
If however it should persist, the machine should be stopped and the basket assembly (5) cleaned. Certain products have the ability to clog or block the sieve holes, in which case the basket assembly (5) will need to be cleaned more frequently.

## HOW TO STOP THE MACHINE

The machine can be stopped in several ways:

- by using the On / Off switch (11),
- by operating the bowl (4) cover (2) clamping handle (1)
- by unplugging the mains cord plug (10)

## CHANGING PRODUCTS DURING JUICE PRODUCTION AND CLEANING IN PLACE

You can change from carrots then to apples to prepare an apple/carrot juice
You can either mix the fruits and vegetables to prepare the juice required, or change production from one juice to another but without having to remove and clean the elements of the machine.
Simply:

1. place a new recipient under the bowl spout,
2. carry out a quick, automatic basket clean. While the basket is turning, introduce water into the cover channel.

This cleaning can only be contemplated in exceptional cases of small quantities of different juices for individual glass use.

ENG

# SAFETY / MAINTENANCE

## COVER AND BOWL PRESENCE SAFETY DEVICE:

For the juice extractor to be able to start, the cover (2) and the bowl (4) must be centered in position on the bowl centering device (7) and held by the clamping handle (1).
Putting the clamping handle in the vertical position (up) without the bowl or without the cover means that the machine cannot be started.

## MOTOR OVERLOAD SAFETY FEATURE:

Should the motor become blocked (foreign body, object that is too hard, too much pressure with the fruit plunger on the products being processed), the On / Off switch (11) automatically trips to the 0 position.
Correct the problem and press the On / Off switch (11) (position 1).

If the problem persists, switch off the power supply to the machine (unplug the cord from the mains socket (10)) and call in the maintenance service or contact a SANTOS approved dealer.

## MOTOR OVERHEATING SAFETY FEATURE:

If the motor overheats, the On / Off switch (11) automatically trips to the 0 position. Wait for the motor to cool (15 to 30 minutes), then push the On / Off switch (11) (position 1).

If the problem persists, switch off the power supply to the machine (unplug the cord from the mains socket (10)) and call in the maintenance service or contact a SANTOS approved dealer.

## TOOL ACCESS SAFETY FEATURE:

The juice extractor can only be started if the cover and bowl are positioned correctly on the motor unit (7) and the clamping handle is in the closed and locked position.

Releasing the cover (2) clamping handle (1) results in the machine stopping and the immobilization of the rotating elements in less than 3 seconds.
Re-starting the juice extractor requires specific operation of the On / Off switch (11) again (position 1).
A cut in the mains power supply results in the On / Off switch (11) stopping (position 0).

## MAINTENANCE

Before carrying out any work on the juice extractor, the machine must in all cases be unplugged from the mains power supply and the motor start capacitor discharged:

ENG

**Discharging the capacitor:**

Use a screwdriver with insulated handle to touch the 2 connectors on the capacitor (13). The appearance of an electric arc shows that the capacitor has discharged.

**Spare Parts :**

**IMPORTANT:** Use of spare parts other than certified original SANTOS parts is prohibited

This machine requires no particular maintenance because the bearings are lubricated for life.
Work may however be required to change parts subject to wear such as the electrical components like the start capacitor and the start relay. In this case, refer to the list of components suitable for your machine depending on its operating voltage, (to be found on the warranty sheet supplied with the machine, and on the rating plate underneath the machine).

The grater (14) and to a lesser extent the basket assembly (5) can be considered as parts subject to wear.
For the machine to operate properly, it is recommended that a check is also made that the locking membrane (15) is in good condition, in particular the absence of any signs of tearing.
Also check that the rubber drive sprockets are in good condition (17), in particular the absence of any signs of wrenching.

For **all spare part orders** (see references in the exploded view at the end of the manual), state the **type, the appliance serial number and the electrical specifications recorded under the appliance**.

## UPKEEP:

**Neither a hose nor a pressure hose should be used for cleaning**

- After use, clean the basket assembly, bowl, cover, pulp container, plunger and bowl centering device in clean water or with a dish washing detergent product designed for this purpose. Then rinse and dry. Do not use abrasive products or pads to clean the basket assembly.
- The base and the motor unit trim should be cleaned with a soft, damp sponge and then dried.

**CARE:**

**For easier cleaning, do not leave food remains to dry in the bowl (4), the basket assembly (5), the cover (2), or the fruit plunger (3).**
**It is recommended that all these parts of the machine are cleaned immediately after the work is finished.**

ENG

# FAULT FINDING

First identify exactly why the machine stopped.

**The machine will not start:**

- Check: the mains power supply and the condition of the power supply cord,
- Check: the position of the juice bowl on the motor unit, the position of the cover on the juice bowl, and the locking of the clamping handle on the cover.

**The machine stops because the motor has overheated**:
(the metal casing around the motor unit is hot)
- Put the On / Off button (11) to the 0 position, then remove the plug from the power supply socket and follow the instructions in the section on "motor overheating safety feature".

**The machine stops because of an overload:**
- see the section on "motor overload safety feature"

**The machine vibrates when running empty:**
This vibration is caused by an imbalance. This imbalance may be caused by:

- The basket being positioned incorrectly: check it is correctly positioned
- Damage to the shape of the basket or its plastic base: check and replace where appropriate.

ENG

# REFERENCE TO STANDARDS

**The juice extractor No. 50 complies with the following European standards:**

- CE (Europe) checked by the LNE National Test Laboratory.
- GS (Germany) checked by the LNE National Test Laboratory.
- UL (USA) and cUL (Canada).
- NSF (USA).

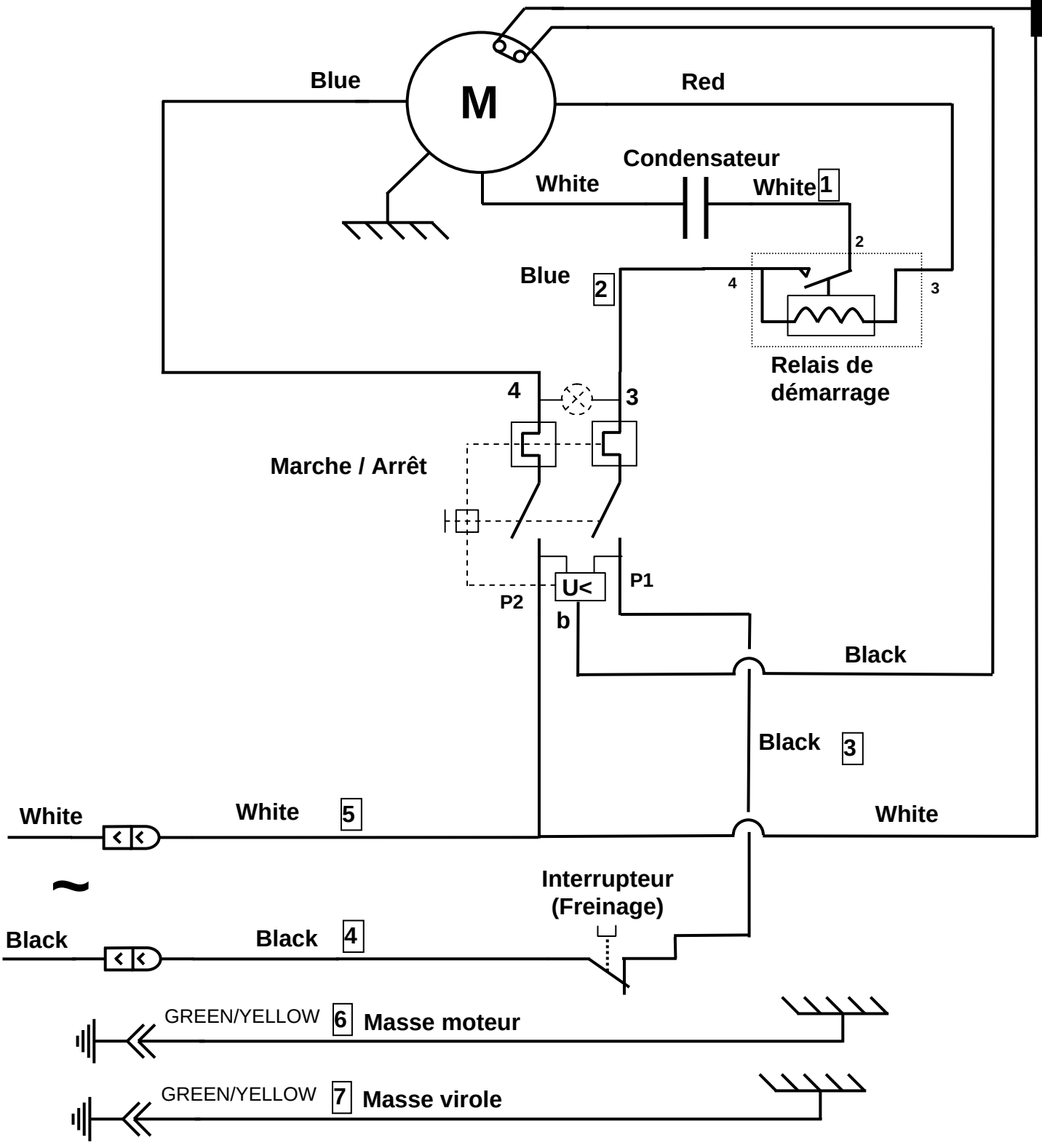
# TECHNICAL SPECIFICATIONS (1)

| | | |
|---|---|---|
| **Mains:** | | |
| Power supply voltage (V) | 220-240 | 110-120 |
| Frequency (Hz) | 50 / 60 | 50 / 60 |
| Start capacitor (µF) | 50-260V | 250-160V |
| Start relay (SANTOS reference) | 50545 | 50545B |
| **Motor:** | | |
| Rating (kW) | 0.6 | 0.8 |
| Power requirement (A) | 3.5 | 8.5 |
| Motor speed (rpm) | 3000 / 3600 | 3000 / 3600 |
| Time for machine to stop | 3 secs max | 3 secs max |
| **Noise** (2) (dBA) Measured at 3000 rpm LAeq, dB | 65 | 65 |
| **Dimensions and weight** | | |
| Height (mm) | 450 | |
| Width (mm) | 260 | |
| Depth (mm) | 470 | |
| **Net weight** (kg) | 15.5 | |
| **Packaged weight** (kg) | 16.5 | |
| Container capacity (Liters) | 7.5 | |
| Temperature of products processed | Min: 4°C | Max: 120°C |
| Bowl spout height (mm) | 200 | |

(2) ref 20µPa

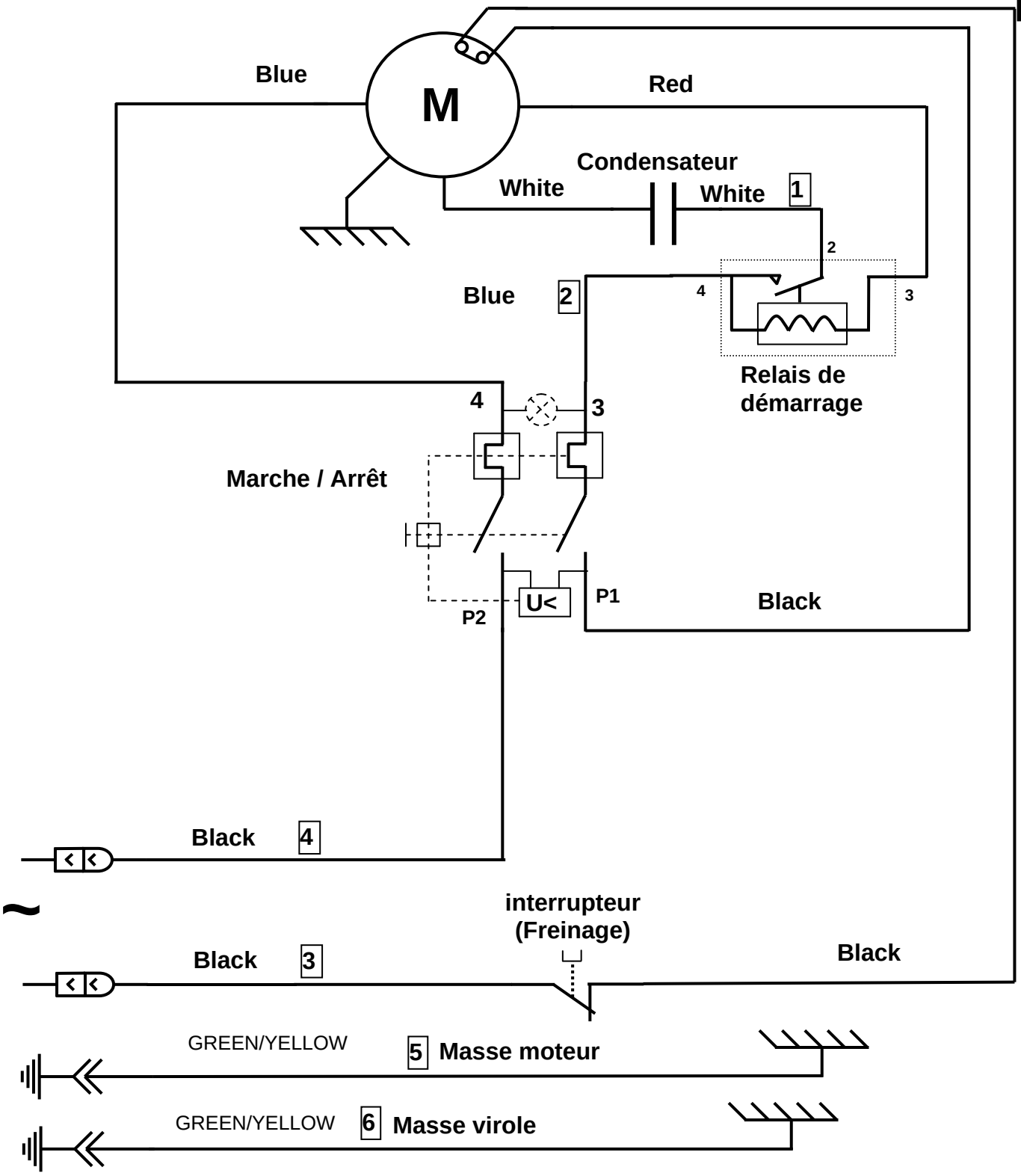
ENG

## Electrical wiring diagram 110-120V 50/60Hz



ENG

## Electrical wiring diagram 220-240V 50/60Hz



## TRANSLATION CHART FOR ELECTRICAL COMPONENTS

| Fr | En |
|---|---|
| Moteur | Motor |
| Condensateur | Capacitor |
| Relais de démarrage | Start relay |
| Interrupteur (freinage) | Switch (brake) |
| Marche / Arrêt | On / Off |
| Masse moteur | Motor ground |
| Masse virole | Shell ground |

## TRANSLATION CHART FOR WIRE COLORS

| Fr | En |
|---|---|
| BLANC | WHITE |
| NOIR | BLACK |
| BLEU | BLUE |
| ROUGE | RED |
| VERT/JAUNE | GREEN / YELLOW |

## TRANSLATION CHART FOR THE MACHINE ELEMENTS

| item | Fr | En |
|---|---|---|
| 1 | Poignée de serrage | Clamping handle |
| 2 | Couvercle | Cover |
| 3 | Poussoir | Plunger |
| 4 | Cuve | Bowl |
| 5 | Panier centrifugation | Centrifugation basket |
| 6 | Conteneur à pulpe | Pulp container |
| 7 | Centreur de cuve | Bowl centering device |
| 8 | Entraîneur | Drive |
| 9 | Tige de serrage | Clamping rod |
| 10 | Cordon alimentation | Power supply cord |
| 11 | Interrupteur Marche / Arrêt | On / Off switch |
| | | |
| 13 | Condensateur | Capacitor |
| 14 | Râpe | Grater |
| 15 | Membrane de verrouillage | Locking membrane |
| 17 | Pion d'entraînement | Drive pin |

ENG

## Figures :

Figure 1

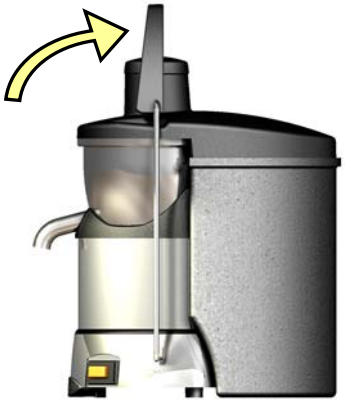


Figure 2

Figure 3

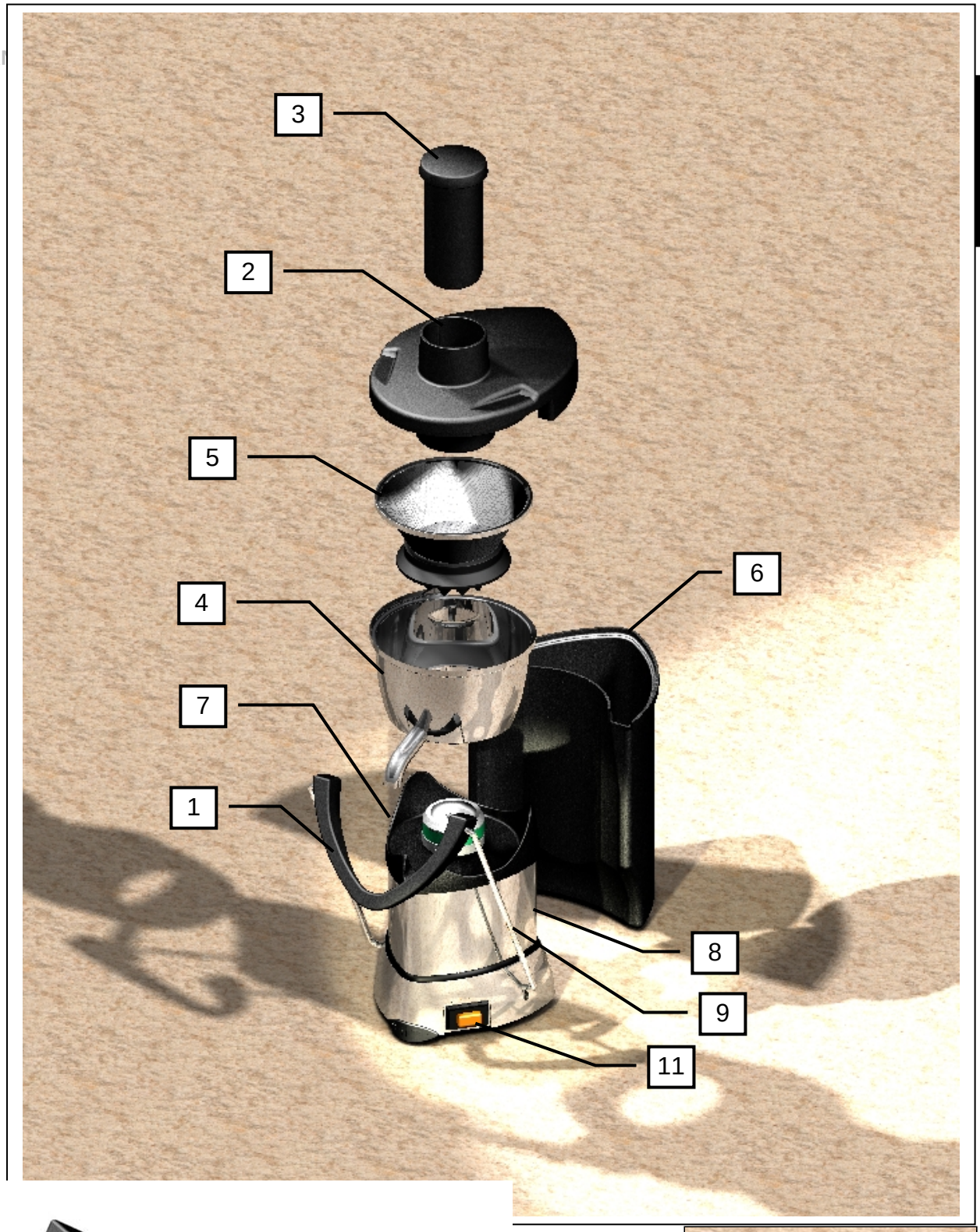
Figure 4

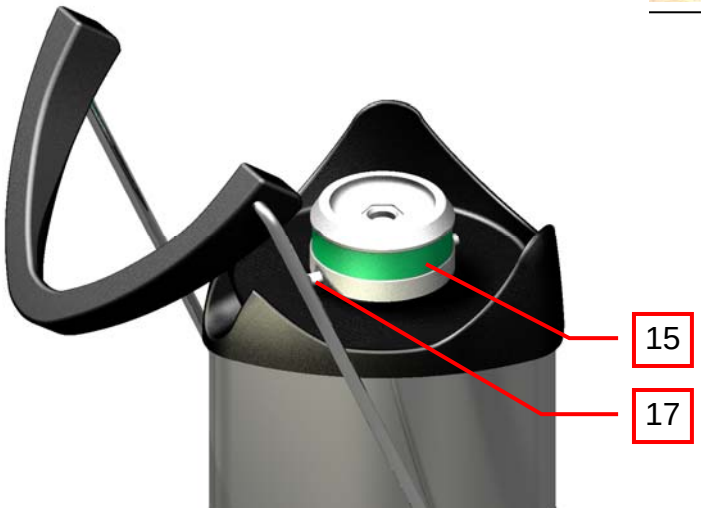
Figure 5

Figure 6

Figure 7

Figure 8


3
2
5
6
4
7
1
8
9
11


15
17

14

ENG

# WARRANTY CERTIFICATE

## WARRANTY

This appliance is guaranteed for twelve months from the date of manufacture appearing on the identification plate.
The guarantee is strictly limited to the free replacement of any original part acknowledged by us as being defective as a result of a fault or a manufacturing defect and identified as belonging to the appliance in question.
It does nor apply to damage resulting from an installation or use which does not comply with the instructions supplied with each appliance (user manual) or in the event of an obvious lack of maintenance or non-observance of basic electrical safety rules.
All part replacements under warranty are made after return of the defective part to our workshops carriage paid, accompanied by a copy of this warranty certificate on which the serial number of the appliance is shown.
All appliances have an identification plate bearing a serial number identical to that on this warranty certificate.
In the event of serious damage which is deemed only to be repairable in our workshops, and after agreement from our services, all appliances under warranty are to be dispatched by the client carriage paid. If the appliance is repaired outside the warranty, the forwarding and return transport is the responsibility of the client. Parts and labour are invoiced at the prices in force (spare parts price - hourly labour cost). All repairs will be subject to a prior estimate which should be agreed before repair.
In the event of a dispute, the Courts for the manufacturer's area (Lyons) alone have jurisdiction.

# APPLIANCE IDENTIFICATION PLATE

**SPECIMEN**
**For all documents not supplied with the appliance.**

**Printed, Faxed and Downloaded**